



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/042,412

01/07/2002

James W. Arendt

AUS919970761US2

9333

42640

7590

06/22/2006

DILLON & YUDELL LLP

8911 NORTH CAPITAL OF TEXAS HWY

SUITE 2110

AUSTIN, TX 78759

EXAMINER

JEAN GILLES, JUDE

ART UNIT

PAPER NUMBER

2143

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Office Action Summary

Application No.

10/042,412

Applicant(s)

ARENDT, JAMES W.

Examiner

Jude J. Jean-Gilles

Art Unit

2143

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-10,12,14-16,21,23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 2,3,5,11,13,17-20,22,24 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/07/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is responsive to communication filed on 01/07/2002. Claimed priority is granted from Divisional Application 09114051, Filing Date 07/10/1998.

Information Disclosure Statement

1. The references listed on the Information Disclosure Statement submitted on 01/07/2002 have been considered by the examiner (see attached PTO-1449A).

Claim Objections

2. Claims 2, 3, 5, 11, 13, 17-20, 22, 24, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 6-7-10, 12, 14-16, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorczyca et al (Gorczyca), Patent No. 5,822,531 in view of Wolff (Wolff), U.S. Patent No: 6,101,508.

Regarding claim 1, Gorczyca teaches the invention substantially as claimed.

Gorczyca discloses a cluster multiprocessing system (fig. 1), comprising:

a plurality of data processing systems segregated into a plurality of resource groups each including an application and at least two data processing systems (column 4, lines 35-67);

a plurality of configuration objects each corresponding to a resource group within the plurality of resource groups (column 4, lines 35-67; column 5, lines 1-49), each configuration object containing:

configuration and status information for the corresponding resource group (column 7, lines 37-67; column 8, lines 1-9); however, Gorczyca does not teach in details the steps below which are taught by Wolff in the same of endeavor:

an associated owners list identifying data processing systems within the corresponding resource group [see Wolff; fig. 6; column 24, lines 48-67; column 25; lines 1-27];

a configuration database on each data processing system within the cluster multiprocessing system, each configuration database containing at least one configuration object [see Wolff; fig. 1, item 120; column 24, lines 48-67; column 25; lines 1-27],

wherein a configuration object for a resource group is replicated on each data processing system identified in the owners list associated with the configuration object [see Wolff; column 28, lines 40-67].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Wolff's teachings of a method and apparatus with an owners' list and a configuration object to replicate the identified data processing system, with the teachings of Gorczyca, for the purpose of *"providing a system and a method for dynamically reconfigure a cluster of computer systems, which permit the default configuration of the cluster to be modified without limiting the availability of system resources and services owned by the cluster."* as stated by Gorczyca in lines 15-20 of column 2. By this rationale **claim 1** is rejected.

Regarding **claim 4**, the combination Gorczyca - Wolff teaches the cluster multiprocessing system of claim 1, wherein each configuration database on a data processing system contains a configuration object for each resource group including the data processing system [see Gorczyca; [see Wolff; fig. 1, item 120; column 24, lines 48-67; column 25; lines 1-27] . The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 4 [see Gorczyca, column 2, lines 15-20]. By this rationale **claim 4** is rejected.

Regarding **claim 6**, the combination Gorczyca - Wolff teaches the cluster multiprocessing system of claim 1, wherein the owners list associated with a configuration object identifies data processing systems which may alter the configuration object [see Gorczyca; [see Wolff; fig. 1, item 120; column 24, lines 48-67; column 25; lines 1-27] . The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 6 [see Gorczyca, column 2, lines 15-20]. By this rationale **claim 6** is rejected.

Regarding **claim 7**, the combination Gorczyca - Wolff teaches the cluster multiprocessing system of claim 1, wherein a configuration object may only be altered by a data processing system identified within the owners list associated with the configuration object [see Gorczyca; [see Wolff; fig. 1, item 120; column 24, lines 48-67; column 25; lines 1-27] . The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 7 [see *Gorczyca, column 2, lines 15-20*]. By this rationale **claim 7** is rejected.

Regarding **claim 8**, the combination Gorczyca - Wolff teaches a method of managing cluster configuration information, comprising:

dividing a cluster into a plurality of resource groups each including an application and at least two data processing systems [see Gorczyca column 4, lines 35-67];

instantiating a plurality of configuration objects corresponding to the plurality of resource groups [see Gorczyca; column 4, lines 35-67; column 5, lines 1-49], each configuration object containing:

configuration and status information for a corresponding resource group[see Gorczyca; column 7, lines 37-67; column 8, lines 1-9]; and

an associated owners list identifying data processing systems within the corresponding resource group [see Wolff; fig. 6; column 24, lines 48-67; column 25; lines 1-27];

maintaining a configuration database on each data processing system within the cluster multiprocessing system, each configuration database containing at least one

configuration object [see Wolff; fig. 1, item 120; column 24, lines 48-67; column 25; lines 1-27],

wherein the configuration database on a data processing system contains each configuration object for a resource group which identifies the data processing system as an owner in the owners list associated with the configuration object [see Wolff; column 28, lines 40-67]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 8 [see *Gorczyca, column 2, lines 15-20*]. By this rationale **claim 8** is rejected.

Regarding **claim 9**, the combination Gorczyca - Wolff teaches the method of claim 8, further comprising: replicating a configuration object on each data processing system identified within the owners list associated with the configuration object [see Wolff; fig. 6; column 24, lines 48-67; column 25; lines 1-27]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 9 [see *Gorczyca, column 2, lines 15-20*]. By this rationale **claim 9** is rejected.

Regarding **claim 10**, the combination Gorczyca - Wolff teaches the method of claim 8, wherein the step of maintaining a configuration database on each data processing system within the cluster multiprocessing system further comprises: maintaining, within the configuration database on a data processing system, a copy of a configuration object for each resource group including the data processing system [see Wolff; fig. 6; column 24, lines 48-67; column 25; lines 1-27]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 10 [see *Gorczyca, column 2, lines 15-20*]. By this rationale **claim 10** is rejected.

Regarding **claim 12**, the combination Gorczyca - Wolff teaches the method of claim 8, wherein the step of instantiating a plurality of configuration objects corresponding to the plurality of resource groups further comprises: listing, within the owners list associated with a configuration object, data processing systems permitted to alter the configuration object [see Wolff; fig. 6; column 24, lines 48-67; column 25; lines 1-27. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 12 [see *Gorczyca*, column 2, lines 15-20]. By this rationale **claim 12** is rejected.

Regarding **claim 14**, the combination Gorczyca - Wolff teaches a method of partially replicating configuration information in a distributed database, comprising:
defining a subset of data processing systems within a cluster system as a resource group; defining configuration data for the resource group [see *Gorczyca*; fig. 1A, item 40; column 3, lines 57-67; column 4, lines 1-27]; and
replicating the configuration data only on each data processing system within the resource group [see Wolff; column 28, lines 39-67]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 14 [see *Gorczyca*, column 2, lines 15-20]. By this rationale **claim 14** is rejected.

Regarding **claim 15**, the combination Gorczyca - Wolff teaches the method of claim 14, wherein the step of defining a subset of data processing systems within a cluster as a resource group further comprises: defining a highly available application and each data processing system designated to manage the application as a resource group [see *Gorczyca*; column 3, lines 57-67; column 4, lines 1-27]. The same motivation

Art Unit: 2143

that was utilized in the combination of claim 1, applies equally as well to claim 15 [see *Gorczyca*, column 2, lines 15-20]. By this rationale **claim 15** is rejected.

Regarding **claim 16**, the combination *Gorczyca* - *Wolff* teaches the method of claim 15, wherein the step of defining a highly available application and each data processing system managing the application as a resource group further comprises: defining a plurality of resource groups for each highly available application within the cluster, each resource group including all data processing systems managing the corresponding application [see *Gorczyca*; fig. 1A, item 40; column 3, lines 57-67; column 4, lines 1-55]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 16 [see *Gorczyca*, column 2, lines 15-20]. By this rationale **claim 16** is rejected.

Regarding **claim 23**, the combination *Gorczyca* - *Wolff* teaches a computer program product in a computer usable medium, comprising:

instructions defining a subset of data processing systems within a network as a resource group [see *Gorczyca*; fig. 1A, item 40; column 3, lines 57-67; column 4, lines 1-27];

instructions defining configuration data for the resource group; and

instructions for replicating the configuration data only on each data processing system within the resource group [see *Wolff*; column 28, lines 39-67]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 23 [see *Gorczyca*, column 2, lines 15-20]. By this rationale **claim 23** is rejected.

Art Unit: 2143

Regarding **claim 25**, the combination Gorczyca - Wolff teaches the computer program product of claim 23, wherein the instructions defining a highly available application and each data processing system managing the application as a resource group further comprise: instructions defining a plurality of resource groups for each highly available application within the network, each resource group including all data processing systems managing the corresponding application [see Gorczyca; column 4, lines 35-67; column 5, lines 1-49]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 25 [see *Gorczyca*, column 2, lines 15-20]. By this rationale **claim 25** is rejected.

5. **Claims 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorczyca et al (Gorczyca), Patent No. 5,822,531 in view of Short et al (Short), U.S. Patent No: 6,178,529 B1.

Regarding **claim 21**, Gorczyca teaches the invention substantially as claimed. Gorczyca discloses a data processing system, comprising:

- a processor executing instructions for an application server (column 2, lines 62-67);

- a memory containing configuration information for the cluster system and configuration information for at least one resource group within the cluster system, wherein the resource group is associated with the application server, the configuration information for the at least one resource group including an identification of other data processing systems in the resource group (column 3, lines 57-67; column 4, lines 1-67).

Art Unit: 2143

However, Gorczyca does not teach the details of a data processing system that contain a connection port permitting connection of the data processing system to a cluster system to receive request for the application server, discloses by Short in column 3, lines 45-67, and column 4, lines 1-31.

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Short's teachings of a method and apparatus with a connection port that allows connection between a data processing system to a cluster system to receive request from s server, with the teachings of Gorczyca, for the purpose of *"providing a system and a method for dynamically reconfigure a cluster of computer systems, which permit the default configuration of the cluster to be modified without limiting the availability of system resources and services owned by the cluster."* as stated by Gorczyca in lines 15-20 of column 2. By this rationale **claim 21** is rejected.


Conclusion


6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Jude Jean-Gilles
Patent Examiner
Art Unit 2143


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

JJG 
July 10, 2005